

MIL-C-17/2A
 24 April 1978-----
 SUPERSEDING
 MIL-C-17/2
 7 September 1955

MILITARY SPECIFICATION SHEET
 CABLE, RADIO FREQUENCY, FLEXIBLE COAXIAL,
 75 OHMS, M17/2-RG6

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The complete requirements for procuring the cable described herein shall consist of this document and the latest issue of Specification MIL-C-17.

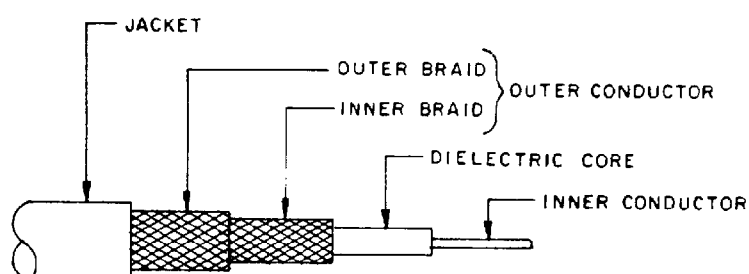


FIGURE 1. Configuration.

TABLE I. Description.

Components	Construction details		
Inner conductor	Solid, copper-covered, steel wire. Diameter: .0285 inch \pm .0010.		
Dielectric core	Type A-1: Solid polyethylene. Diameter: .185 inch \pm .004.		
Outer conductor	Double braid of AWG #34, copper wire. Diameter: .264 inch maximum.		
Inner braid	<u>Alternates</u>		
	Wire coating:	Silver-coated	Silver-coated
	Coverage:	95.0% nominal	95.0% nominal
	Carriers:	16	24
	Ends:	9	6
Outer braid	Picks/inch:	5.9% \pm 10	8.8% \pm 10
	Wire coating:	Bare	Bare
	Coverage:	95.0% nominal	95.0% nominal
	Carrier:	16	24
	Ends:	9	6
Picks/inch:	8.7% \pm 10	13.0% \pm 10	
Jacket	Type Ila. Diameter: .332 inch \pm .004.		

ENGINEERING INFORMATION:

Continuous working voltage: 2,000 Vrms, maximum.
 Operating frequency: 3 GHz, maximum.
 Velocity of propagation: 65.9 percent, nominal.
 Power ratings: See figure 2.
 Operating temperature range: -40 to +85°C.
 Weight: 8.2 pounds per 100 feet maximum.

Inner conductor properties:

DC resistance (maximum at 20°C): 4.4 ohms per 100 feet.
 Elongation: 30 percent, minimum.
 Tensile strength: 115 klbf/inch², minimum.
 Engineering notes: This cable useful in low temperature applications.
 (See connector series "N" and "SC" per MIL-C-39012).

REQUIREMENTS:

Dimensions, configuration, and descriptions: See figure 1 and table I.

Environmental and mechanical:

Visual and mechanical examination: Applicable.
 Eccentricity: 10 percent, maximum.
 Adhesion of conductors:
 Inner conductor to core: 4 pounds, minimum; 12 pounds, maximum.
 Aging stability: +98° ±2°C.
 Cold bend: -40° ±2°C.
 Dimensional stability: +85° ±2°C.
 Inner conductor from core: 0.062 inch, maximum.
 Inner conductor from jacket: 0.125 inch, maximum.
 Contamination: Applicable.

Electrical:

Spark test: 5,000 Vrms, minimum.
 Voltage withstanding: 7,000 Vrms, minimum.
 Corona extinction voltage: 2,700 Vrms, minimum.
 Characteristic impedance: 75 ohms ±3.
 Attenuation: 6.5 dB per 100 feet, maximum at .4 GHz; 23.0 dB per 100 feet, maximum at 3.0 GHz.
 Capacitance 20.5 pF per foot, maximum.

Part number: See table II.

Supersession data: See table II.

TABLE II. Cross reference of part number.

Part number	Superseded part number or type designation
M17/2-RG6	RG-6A/U

NOTE: Revision letters are not used to denote changes due to the extensiveness of the changes.

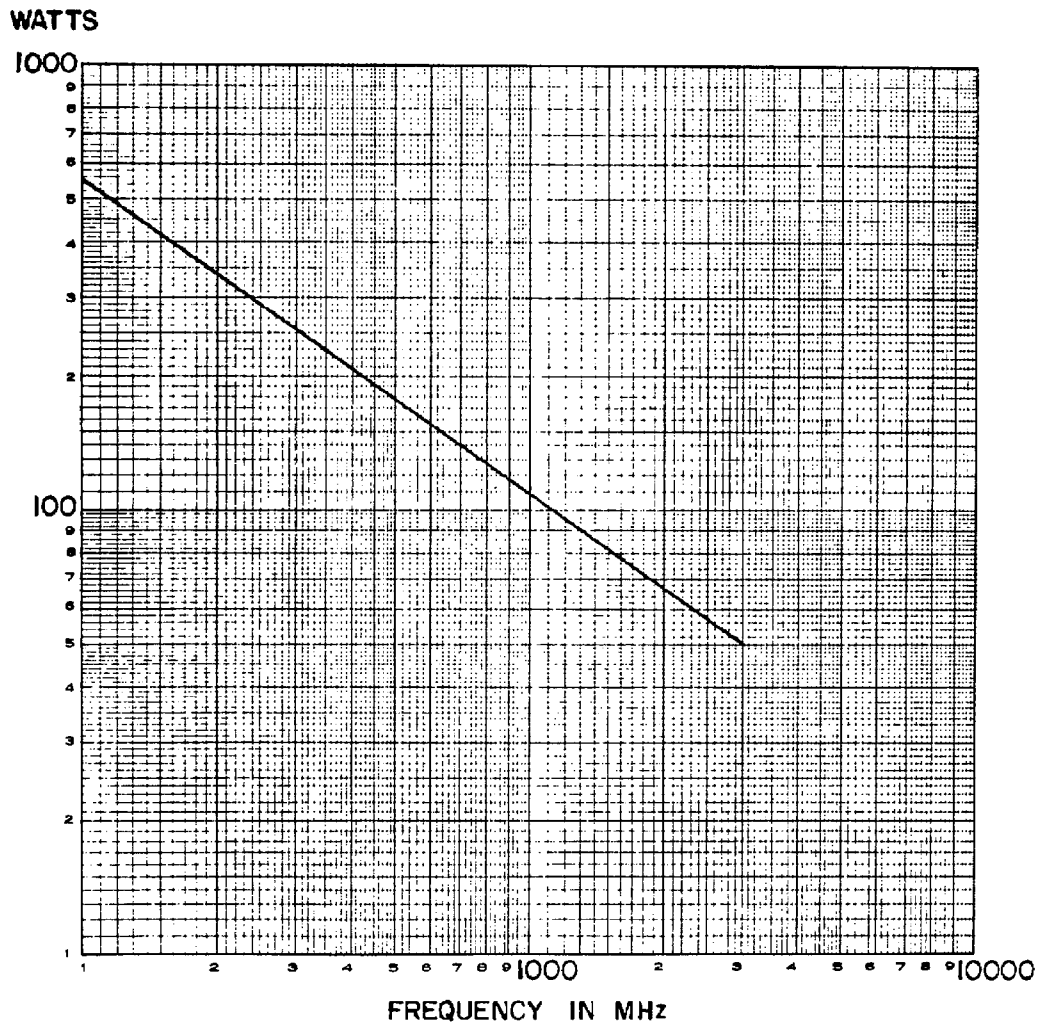


FIGURE 2. Power rating @ 25°C sea level.

MIL-C-17/2A

Custodians:

Army: EL
Navy - EC
Air Force - 99

Review activities:

Army - M1
Navy - SH
Air Force - 17, 85, 11
DLA - ES, IS

User activities:

Army - ME, AT, AR
Navy - AS, OS, MC
Air Force - 19

Preparing activity:

Army - EL

Agent:

DLA - ES

(Project 6145-0703-1)